



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/509,409	09/23/2004	Christoph Gerard August Hoelen	NL 020264	8032

24737 7590 07/26/2006

PHILIPS INTELLECTUAL PROPERTY & STANDARDS  
P.O. BOX 3001  
BRIARCLIFF MANOR, NY 10510

EXAMINER

LEE, Y MY QUACH

ART UNIT PAPER NUMBER

2875

DATE MAILED: 07/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/509,409

Applicant(s)

HOELEN ET AL.

Examiner

Lee Y Quach

Art Unit

2875

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 6-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-20 is/are allowed.
- 6) ☒ Claim(s) 1-3, 7-9 and 13-17 is/are rejected.
- 7) ☒ Claim(s) 6 and 10-12 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

***DETAILED ACTION***

***Response to Arguments***

1. Applicant's arguments filed May 10, 2006 have been fully considered but they are not persuasive. Applicant states that Gotoh neither teaches nor suggests that the surface of the second edge surface is specularly or diffusely reflecting or is provided with a specularly or diffusely reflecting material as now called for by claim 1. It should be noted that Gotoh teaches that the surface of the second edge surface is specularly reflecting or is provided with a specularly reflecting material. Applicant's attention is directed to paragraph 0050, lines 1, 2, 9 to 11 where they describe that the second surface is a light reflection surface (14) or has a highly reflecting material which meets the limitation of specularly (capable of reflecting light like a mirror) reflecting or provided with a specularly reflecting material. Rejection of claims 1 to 3, 7, 8 and 13 to 16 are therefore maintained and follows. With regards to claim 6, Applicant states that the surfaces (243) are not stepped because they are not parallel to the front surface (321, 322) as called for by new claim 17. It should be noted that the feature upon which applicant argues is not recited in claim 17. Claim 17 states that the surface of the step facing the front wall is "substantially" parallel. The surface of the step of Nakabayashi et al. is "substantially" parallel to the front surface and therefore meets the limitation as claimed. Accordingly, rejection of claim 17 anticipated by Nakabayashi et al. maintains and follows. With regards to claim 9, Lammers shows a translucent diffuser (28) placed in front of the panel which meets the limitation as claimed. Accordingly, rejection of claim 9 as being unpatentable over Gotoh et al. in view of Lammers follows.

***Claim Objections***

2. Claim 6 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim 1. Applicant is required to cancel the claim or amend the claim to place the claim in proper dependent form. For instance, claim 1 recites that the surface of the second edge surface is specularly or diffusely reflecting or is provided with a specularly or diffusely reflecting material while claim 6 depends on claim 1 recites that the second edge surface is light transmitting with a second light source associated with the second edge surface...

***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1 to 3, 7, 8, 13, 15 and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Gotoh et al. (prior art previously cited).

Gotoh et al. show a light emitting panel (10) comprising a front wall (16), a rear wall (17) situated opposite to the front wall, a first edge surface (12, 34) being light transmitted, a second edge surface (14) opposite the first edge surface such that the second edge surface is reflecting with respect to light inside the panel, the surface of the second edge surface having a specularly reflecting material (paragraph 0050, lines 9 to 10), at least a first light source (22) associated with the first edge surface, the light source comprising at least two light emitting diodes (paragraph 0050, line 14) with different light emission wavelengths (red 22a, green 22b or blue 22c), light originating from the first light source incident on the first edge surface and distributed in the panel, the panel widens over a widening section from the first edge surface in a direction towards the second edge surface (figures 1B, 1C, 2B, 2C ...), the rear wall provided over the widening section with a multiplicity of steps (18) of which a surface facing the front wall is substantially parallel to the front wall, a further surface (19) of the steps having an angle  $\beta$  with respect to a normal on the front wall such as 37 degrees which is within the range of -48 degrees to 48 degrees, wherein the ratio of the surface area (T1) of the first edge surface and the largest cross section (T2) in the panel substantially parallel to the first edge surface is 1.9 (paragraph 0053, lines 12 to 14) which satisfies the relation as claimed in claims 2 and 3, and a display device comprising a liquid crystal display (2).

5. Claim 17 is rejected under 35 U.S.C. 102(e) as being anticipated by Nakabayashi et al. (prior art previously cited).

Nakabayashi et al. show a light emitting panel (203) comprising a front wall (321, 322, figure 23c), a rear wall (figure 23c) situated opposite to the front wall, a first edge surface (the light incident surface) being light transmitted, a second edge surface (figure 23c) opposite the first edge surface such that the second edge surface is light transmitting, at least a first light source (212) associated with the first edge surface, a second light source (211) associated with the second edge surface, light originating from the first light source incident on the first edge surface and distributed in the panel, light originating from the second light source incident on the second edge surface and distributed in the panel, the panel widening over a widening section from the first edge surface in a direction towards the second edge surface (figure 23c), the panel widening from the second edge surface in a direction towards the first edge surface (figure 23c), the rear wall provided over the widening section with a multiplicity of steps (243) of which a surface facing the front wall is substantially parallel to the front wall.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoh et al. in view of Lammers (prior art previously cited).

Gotoh et al. disclose the invention substantially as claimed with the exception of having the front wall provided with a translucent diffuser.

Lammers teaches that it is known in the art to have the front wall provided with a translucent diffuser.

It would have been obvious to one skilled in the art to provide the front wall of Gotoh et al. with a translucent diffuser, as shown by Lammers, to diffuse and uniform the light coupled out from wall.

8. Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gotoh et al. in view of Lammers (prior art previously cited).

Gotoh et al. disclose the invention substantially as claimed with the exception of having the light emitting diode at least 5 lm.

Lammers teaches that it is known in the art to use light emitting diode having at least 5 lm (column 9, lines 2 to 3) in light emitting panel display device.

It would have been obvious to one skilled in the art to provide the light emitting diode of Gotoh et al. with at least 5 lm, as shown by Lammers, for the advantage of enabling the light to be coupled into the light emitting panel with a higher efficiency, hardly emitting heat as well as issuing detrimental radiation, and to overall provide a compact illumination system.

9. Claims 10 to 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. Claims 18 to 20 are allowed.

#### ***Conclusion***


11. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y Quach Lee whose telephone number is 571-272-2373. The examiner can normally be reached on Tuesday and Thursday from 8:30 am to 4:30 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Customer Service whose telephone number is 571-272-2815.

Y.Q.  
July 18, 2006

  
Y Quach Lee  
Primary Examiner  
Art Unit 2875